

CHAPTER 4



A Conceptual History  
of the Achievement Goal Construct

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Many different psychological constructs have been used over the years to explain and predict the energization and direction of behavior in achievement situations, such as the classroom, the workplace, and the ballfield. Each of these constructs (e.g., the achievement motive construct, the perceived competence construct, the achievement goal construct) has focused in some way and to some degree on competence. The study of competence and how individuals are motivated with regard to competence has had an important place in many different disciplines within psychology, including developmental psychology, educational psychology, industrial-organizational psychology, social-personality psychology, and sport psychology.

Integral to a motivational analysis of competence is the issue of valence. Persons may be energized by or directed toward the positive possibility of competence per se, and/or they may be energized by or directed away from the negative possibility of incompetence. This distinction between approach

motivation and avoidance motivation is a fundamental and basic aspect of competence-relevant motivation.

The construct that currently receives the most research attention in the literature on competence-relevant motivation is the achievement goal construct. In this chapter, I offer a conceptual history of the achievement goal construct, describing the emergence of the construct and noteworthy developments in the achievement goal literature from its inception to the present day. From day one, the achievement goal construct was grounded in a distinction between mastery and performance forms of competence-relevant motivation. It was not until significantly later in the development of the literature that the approach-avoidance distinction was also considered fundamental to the achievement goal construct. As such, in overviewing the achievement goal literature, I devote particular attention to the question of when and how this approach-avoidance distinction was incorporated into the achievement goal con-

struct. I conclude my conceptual overview by offering some observations regarding the contemporary achievement goal literature.

#### THE EMERGENCE OF THE ACHIEVEMENT GOAL CONSTRUCT

The achievement goal construct was developed in independent and collaborative work by Carol Ames, Carol Dweck, Marty Maehr, and John Nicholls. In the mid- to late 1970s, each of these individuals conducted research programs at the University of Illinois that focused on achievement motivation. In the fall of 1977, they began meeting together in a seminar series on motivation at the Institute for Child Behavior and Development in the Children's Research Center to discuss issues regarding achievement and motivation (Roberts, 2001). The discussions in this seminar series seemed to have had an important influence on the thinking of the participants, because shortly thereafter, unpublished (e.g., Nicholls & Dweck, 1979) and published (e.g., Maehr & Nicholls, 1980) papers emerged that articulated the foundational ideas of the achievement goal approach to achievement motivation. In the ensuing years, Dweck and Nicholls proceeded to offer somewhat distinct achievement goal conceptualizations that have been particularly influential in this tradition. Therefore, their conceptual work is the central focus of the following overview (see also Ames, 1984, and Maehr, 1983, 1984).

Dweck's achievement goal conceptualization emerged from her research on helplessness in achievement settings with late grade-school-age children. In a series of studies, Dweck and her colleagues (Diener & Dweck, 1978, 1980; Dweck, 1975; Dweck & Reppucci, 1973) demonstrated that children of equal ability respond differently to failure on achievement tasks. Some children display an adaptive, "mastery" response pattern, characterized by attributing failure to insufficient effort, continued positive affect and expectancies, sustained or enhanced persistence and performance, and pursuit of subsequent challenge, whereas other children display a maladaptive, "helpless" response pattern, characterized by attributing failure to insufficient ability, the onset of negative affect and expectancies, decrements

in persistence and performance, and avoidance of subsequent challenge.

Dweck (Dweck, 1986; Dweck & Elliott, 1983) sought to explain why children of equal ability display such divergent responses to failure, and she embraced the achievement goal construct as the key explanatory variable. A person's achievement goal was said to represent his or her purpose for engaging in behavior in an achievement situation (Dweck & Leggett, 1988). Two types of goals were identified: performance goals, in which the purpose of behavior is to demonstrate one's competence (or avoid demonstrating one's incompetence), and learning goals, in which the purpose of behavior is to develop one's competence and task mastery.

Children were posited to adopt different goals in achievement settings, and these goals were presumed to lead to differential task construals and differential patterns of affect, cognition, and behavior. Performance goals were presumed to lead to the "helpless" response pattern upon failure, because failure directly implies a lack of normative ability; learning goals, on the other hand, were posited to lead to the "mastery" response pattern, because failure feedback could simply be construed as helpful information in the process of developing competence or mastering a task. Achievement goals were posited to interact with confidence in one's ability in predicting achievement-relevant affect, cognition, and behavior. Performance goals were thought to lead to the "mastery" response pattern when accompanied by high confidence in ability but were thought to lead to the "helpless" pattern when accompanied by low confidence in ability. Learning goals were viewed as leading to the "mastery" pattern regardless of level of confidence in ability.

In articulating her achievement goal construct, Dweck overviewed and highlighted the limitations of both the achievement motive and achievement attribution traditions (as well as others). She believed that the achievement motive tradition overemphasized dispositions and underemphasized the role of cognitions in predicting achievement behavior (Dweck & Wortman, 1982; Dweck & Elliott, 1983), and that the achievement attribution tradition was unable to explain why people strive for competence in the first

place (Dweck & Elliott, 1983). The achievement goal construct was construed as addressing these limitations, albeit not replacing or invalidating the motive and attribution constructs. Achievement goals were viewed as amenable to situation-specific, as well as dispositional, levels of analysis, were viewed as cognitively represented, and were thought to express the specific reason why an individual engaged in achievement behavior (Dweck & Elliott, 1983; Dweck & Leggett, 1988). Implicit theories of ability were identified as separable from achievement goals and were construed as predictors of their adoption. A belief that ability is a stable entity was posited to lead to performance goal adoption, whereas a belief that ability is malleable was posited to lead to learning goal adoption (Dweck & Leggett, 1988). For Dweck, "Achievement goals must lie at the heart of any analysis of achievement motivation" (Dweck & Elliott, 1983, p. 653).

Nicholls's achievement goal conceptualization emerged from his research on the development of conceptions of ability in children. According to Nicholls (1976, 1978, 1980), children initially possess an undifferentiated conception of ability, in which they do not distinguish between ability and effort. From this perspective, high ability is essentially equated with learning and improvement through effort; the more effort expended, the more learning and improvement (and, therefore, ability) implied. By around the age of 12, children acquire a differentiated conception of ability, in which they distinguish between ability and effort, and construe ability as a fixed capacity. From this perspective, effort expenditure must be controlled for when making ability inferences; high ability is inferred when one outperforms others while expending equal effort, or performs the same as others while expending less effort.

Nicholls (1984) sought to integrate his findings on the development of conceptions of ability with existing theories of adolescent and adult achievement motivation, and it is through this process that he articulated his achievement goal construct. An achievement goal was viewed as the purpose of achievement behavior, and it was presumed that the purpose of achievement behavior is to demonstrate or develop high ability (or to avoid

demonstrating low ability). For adolescents and adults, ability may be construed in both undifferentiated and differentiated fashion, so two different types of goals may be identified on this basis. The term "task involvement" was used to refer to seeking ability in the undifferentiated sense (i.e., seeking to develop skills by learning or mastering tasks), and the term "ego involvement" was used to refer to seeking ability in the differentiated sense (i.e., seeking to demonstrate that one has capacity by outperforming others, especially with less effort expenditure).

The two types of goals were presumed to lead to different patterns of achievement-relevant processes and outcomes. Task involvement was portrayed as an intrinsically motivated state that leads to positive achievement-relevant affect, cognition, and behavior, whereas ego involvement was portrayed as a self-conscious, evaluative motivational state that leads to a negative pattern of affect, cognition, and behavior. These goal states were posited to interact with perceived ability in predicting some processes and outcomes (e.g., task choice). Ego involvement was viewed as leading to positive consequences (e.g., selecting moderately challenging tasks) when accompanied by high perceived ability, and to negative consequences (e.g., selecting very easy or very difficult tasks) when accompanied by low perceived ability. Task involvement was viewed as leading to positive consequences across levels of perceived ability.

In articulating his achievement goal construct, Nicholls overviewed the way in which both the achievement motive and achievement attribution traditions (among others) viewed the concept of ability. He noted that both of these traditions emphasized the undifferentiated conception of ability, and failed to recognize that ability may be construed in different ways (Nicholls, 1983). The achievement goal approach was said to offer a more complete portrait of achievement motivation by distinguishing between two different conceptions of ability, and by making different predictions for goals states focusing on each. Nicholls also critiqued the degree to which the achievement motive approach emphasized dispositions (Maehr & Nicholls, 1980), and focused on how achievement goals may be manifest as either situationally specific states

(involvements) or dispositional preferences (orientations). Dispositional goal preferences were viewed as predictors of situationally specific goal states, and goal states were construed as cognitively based intentions. The distinction between ability as capacity and ability as something to be developed was considered an inherent aspect of ability conceptions; as such, this notion of ability as stable or changeable was construed as part of the goal per se rather than as an antecedent of goal adoption. For Nicholls (1984), the conceptions of ability that established achievement goals were "the keys to understanding achievement motivation" (p. 329).

Two additional points regarding Nicholls's theorizing on achievement goals are important to note. First, he explicitly stated that his views on achievement goals were based not only on scientific theorizing but also on his philosophical values regarding the importance of equal motivational opportunities for all individuals (Nicholls, 1979, 1984). From this standpoint alone (independent of empirical data), task involvement was to be championed over ego involvement, because only task involvement affords motivational equality. Second, it must be acknowledged that Nicholls seemed to describe goals and related constructs in different ways across his writings, and that these descriptions were not always clearly articulated. Thus, one may characterize Nicholls's goal construct differently depending on the writings on which one focuses and how one interprets various statements.

Although there are differences in the achievement goal conceptualizations proffered by Dweck and Nicholls, it is their similarities that are most striking and most important to consider in this chapter. First, both conceptualizations were articulated in the context of a literature that emphasized achievement motives and achievement attributions as explanatory constructs. From early conceptual pieces written by Dweck (Dweck & Wortman, 1982; Dweck & Elliott, 1983) and Nicholls (1983; Maehr & Nicholls, 1980), it was clear that their emerging idea of the achievement goal construct was in part a response to perceived weaknesses or limitations of the achievement motive and attribution constructs. Thus, the motive and attribution approaches

to achievement motivation clearly influenced the way in which the achievement goal approach emerged, and both Dweck and Nicholls viewed the achievement goal construct as more of an integration of new and existing concepts than as a completely novel construct created *ex nihilo*.

Second, both Dweck and Nicholls delineated their achievement goal construct in terms of the purpose of achievement behavior. The concept of "purpose" can be defined in two primary ways: as "the reason for which something is done, made, used, etc." and as "an intended or desired result, end, aim, goal" (*Random House Dictionary of the English Language*, 1993). It appears to be used by both Dweck and Nicholls in both of these senses—as the reason for behavior in an achievement situation (e.g., the development or demonstration of ability) and as the aim or outcome that is sought in an achievement situation (e.g., normative or self-referential ability).

Third, both Dweck and Nicholls viewed competence as an important component of the achievement goal construct but clearly incorporated other components as well. For example, the focus on demonstrating ability in the performance/ego involvement goal implicates approval and/or self-presentation, in addition to competence. Indeed, both Dweck (Dweck & Elliott, 1983) and Nicholls (1984) indicated that the demonstration of ability can involve demonstrating ability to others, and this approval/self-presentation aspect of performance/ego involvement goals was a key feature of both the manipulations (e.g., "although you won't learn new things, it will really show me what kids can do"; see Elliott & Dweck, 1988) and measures (e.g., "I feel that I am successful when I show people I'm good at something"; see Nicholls, 1989) used to empirically examine the effects of these goals.

Fourth, both Dweck and Nicholls proffered a comparable achievement goal dichotomy, and the hypothesized effects of each goal were presumed to be quite similar in nature. One goal (learning/task) was characterized in terms of developing ability and seeking task mastery, and was posited to lead to a wide range of positive processes and outcomes. The other goal (performance/ego) was characterized in terms of demonstrating ability and seeking normative com-

petence, and was posited to lead to a wide range of negative processes and outcomes. In addition, for both theorists, the effects of achievement goals were expected to be moderated by perceptions of competence, at least for some processes and outcomes. Performance/ego goals were posited to exert the most negative impact when accompanied by low perceptions of competence, whereas learning/ego goals were posited to exert the same positive impact across competence perceptions.

Fifth, in articulating their views on achievement goals, both Dweck and Nicholls described the two different goals relative to each other, and Dweck, in particular, sometimes categorized individuals in terms of one type of goal or the other. This has led some to suggest that Dweck, in particular, but also Nicholls, viewed performance/ego and learning/task as opposite poles on a single goal continuum. However, neither theorist explicitly articulated a unidimensional conceptualization of achievement goals, and it seems best to conclude that neither theorist took a firm stance on the dimensionality issue in their early writings. Instead, they simply focused on which of the two goals was most salient for an individual, and this in no way necessitates a unidimensional conceptualization of goals. In their later writings, both Dweck (1989) and Nicholls (1989) explicitly construed the two goals as distinct and separate forms of regulation.

Sixth, both Dweck and Nicholls portrayed achievement goals as applicable to both situational and dispositional levels of analysis (Dweck & Leggett, 1988). In developing their achievement goal constructs, both theorists highlighted the limitations of dispositional constructs (Dweck & Elliott, 1983; Maehr & Nicholls, 1980) and conveyed the importance of attending to more situationally oriented constructs. Interestingly, in empirical work, Dweck tended to focus on situation-specific manifestations of goals (e.g., Elliott & Dweck, 1988), whereas Nicholls tended to focus on dispositional goal orientations (e.g., Nicholls, Cheung, Lauer, & Patashnick, 1989).

Seventh, neither Dweck nor Nicholls made use of the distinction between approach and avoidance motivation in articulating their achievement goal construct.

Early in their writing on achievement goals, it seems as though both theorists may have considered incorporating the approach-avoidance distinction into their work in some manner (see Dweck & Elliott, 1983; Nicholls, 1984). However, it is clear that both decided against explicitly attending to this distinction. Dweck either described both mastery and performance goals in purely appetitive terms (Dweck & Leggett, 1988) or collapsed across approach-avoidance in characterizing performance goals in terms of seeking positive and avoiding negative judgments of ability (Elliott & Dweck, 1988). Nicholls explicitly ignored avoidance motivation altogether, characterizing task and ego goals as "two forms of approach motivation" (Nicholls, Patashnick, Cheung, Thorkildsen, & Lauer, 1989, p. 188).

#### SUBSEQUENT RESEARCH AND DEVELOPMENTS WITHIN THE ACHIEVEMENT GOAL LITERATURE

In the mid- to late 1980s, Dweck and Nicholls began to produce empirical work that supported their ideas about achievement goals (e.g., Elliott & Dweck, 1988; Nicholls, Patashnick, & Nolen, 1985). Many other researchers joined these efforts, and helped to document the utility of the fledgling achievement goal approach (see Ames & Archer, 1988; Butler, 1988; Duda, 1988; Jagacinski & Nicholls, 1987; Koestner, Zuckerman, & Koestner, 1987; Meece, Blumenfeld, & Hoyle, 1988; Nolen, 1988; Sansone, Sachau, & Weir, 1989; Stipek & Kowalski, 1989; Thorkildsen, 1989).

In an influential set of articles, Ames and Archer (1987, 1988) laid out the rationale for an integrative achievement goal approach that brought together not only the conceptualizations of Dweck and Nicholls but also those of theorists such as Ames (1984), Covington (1984), Maehr (1983), and Ryan (1982). Ames and Archer (1987, 1988) argued that the conceptual accounts proposed by the aforementioned theorists were similar enough to justify terminological convergence in the form of a mastery/performance goal dichotomy. This integrative move brought cohesion to the extant literature on achievement and motivation, and

helped to solidify the importance of the achievement goal construct.

It is important to note that in the process of integrating the work of many different researchers, Ames and Archer (1987, 1988) offered an expanded conceptualization of the achievement goal construct. Achievement goals were characterized as networks or patterns of beliefs and feelings about success, effort, ability, errors, feedback, and standards of evaluation. These various beliefs and feelings were presumed to be inter-related within each type of goal, and were thought to provide a wide-ranging framework, or schema, labeled "orientation," through which achievement situations are construed and engaged.

A final aspect of the work of Ames and Archer (1988) warrants highlighting. These researchers introduced the idea that the achievement goal construct could be applied at the classroom, as well as the individual, level of analysis. In their research, they assessed students' perceptions of their classrooms in terms of an emphasis on mastery goals and performance goals, and linked these goal perceptions to students' learning strategies, task choices, attitudes, and attributions. Furthermore, Ames and Archer examined how different combinations of mastery goal and performance goal perceptions correlated with these process and outcome variables. In similar fashion, Duda (1988) examined how different combinations of individuals' mastery and performance goals correlated with process and outcome variables in the sport context.

In the early 1990s, research on achievement goals began to proliferate. There were undoubtedly many reasons for this influx of empirical attention, including the following: The achievement goal construct was intuitively appealing; the achievement goal construct fit nicely with the widespread interest in cognitively based constructs; achievement goal ideas clearly had straightforward applied value; achievement goals were relatively easy to measure and manipulate; and Ames and Archer's (1987, 1988) integration helped generate new research ideas. By this time, empirical research on achievement goals was appearing in a broad range of disciplines, including developmental psychology (see work by Butler, Stipek), educational psychology (see work by Ames, Meece,

Nicholls, Pintrich), sport psychology (see work by Duda, Roberts), and social-personality psychology (see work by Dweck, Harackiewicz).

As previously noted, the achievement goal approach emerged, in part, from philosophical values regarding the importance of equal motivational opportunities for all individuals. In light of this metatheoretical foundation and the clear implications of achievement goal concepts for real-world achievement settings, it is not surprising that educational psychologists, in particular, began to actively utilize the achievement goal approach as a guide for intervention and reform. Ames (1990; 1992) offered an elaborate and particularly influential intervention framework labeled TARGET (Tasks, Authority, Recognition, Grouping, Evaluation, Time; see Epstein, 1988). This framework was designed to create classroom environments that would enhance mastery goal adoption and minimize performance goal adoption in students (see also Blumenfeld, 1992). Maehr and Midgley (1991) established the importance of examining achievement goal influences at the school, as well as the personal and classroom levels, and made the case for a focus on mastery goals in each instance. In sport psychology, Duda and colleagues applied the concept of "perceived motivational climate" to coaches (Seifriz, Duda, & Chi, 1992) and parents (White, Duda, & Hart, 1992), and demonstrated the benefits of mastery goals in these contexts as well. Meece (1991) went beyond measurement of the perceived motivational climate to acquire observers' ratings of goal-relevant features of the achievement environment.

In the early to mid-1990s, several reviews of achievement goal research appeared in journal articles, chapters in edited volumes, and textbooks. Nearly all of these reviews rather unequivocally stated that the extant research on mastery and performance goals provided strong support for the basic hypothesis that mastery goals lead to positive processes and outcomes, whereas performance goals lead to negative processes and outcomes. These reviews tended to focus on the main effects of achievement goals rather than the perceived competence moderator hypothesis. At this point, minimal research on this moderator hypothesis had been conducted, and the extant data had yielded

mixed results (see Miller, Behrens, Greene, & Newman, 1993; Smiley & Dweck, 1994).

For some, these reviews of the literature portraying the effects of mastery goals as exclusively positive and those of performance goals as exclusively negative seemed overstated (Butler, 1992; Harackiewicz & Elliot, 1993). A closer examination of the available research seemed to indicate that mastery goals indeed tended to lead to a host of positive processes and outcomes (although evidence linking mastery goals to positive performance outcomes was conspicuously sparse), but that performance goals sometimes had negative consequences, sometimes had no consequences, and sometimes even had positive consequences. For example, performance goals were shown to have null or positive effects in certain types of achievement contexts (see Koestner et al., 1987; Miller & Hom, 1990; Sansone et al., 1989) and for persons with certain types of personality dispositions (see Elliot & Harackiewicz, 1994; Harackiewicz & Elliot, 1993). This pattern of results led Harackiewicz (Harackiewicz & Elliot, 1993; Harackiewicz & Sansone, 1991), in particular, to explicitly question the proposal that performance goals are maladaptive.

On a related note, some researchers began to posit mastery goals coupled with performance goals as the optimal achievement goal profile, rather than mastery goals coupled with the absence of performance goals (Farr, Hofmann, & Ringenbach, 1993). Research examining the predictive nature of different goal profiles lent some credence to this proposition. Several studies indicated that the "high mastery-high performance goal" combination was linked to the best pattern of processes and outcomes (Ainley, 1993; Bouffard, Boisvert, Vezeau, & Larouche, 1995; Fox, Goudas, Biddle, Duda, & Armstrong, 1994; Wentzel, 1991, 1993), although others supported the "high mastery-low performance goal" combination (Meece & Holt, 1993; Pintrich & Garcia, 1991). The Farr et al. (1993) article cited earlier is also noteworthy for a different reason: It was one of the first articles to emerge from industrial-organizational psychology that explicitly discussed achievement goals (see Kanfer, 1990, for the initial consideration of achievement goals in this discipline). Corresponding empirical work

began to appear shortly thereafter (see Sujan, Weitz, & Kumar, 1994).

Other goals besides the "big two" had been considered for inclusion in achievement goal accounts from the beginning of conceptual and empirical work in this area (see Maehr, 1983; Maehr & Nicholls, 1980; Nicholls et al., 1985). Several candidates for inclusion began to receive more extensive consideration and scrutiny in the early to mid-1990s, most notably, work avoidance goals, extrinsic goals, and social goals (see Urdan, 1997, for a review). Work avoidance goals (also labeled "academic alienation") were defined in terms of trying to get away with putting as little work or effort as possible into achievement tasks (Meece et al., 1988; Nicholls et al., 1985; Nolen, 1988). Extrinsic goals were defined in terms of striving to earn a reward or avoid a punishment (Maehr, 1983; Midgley & Urdan, 1995; Pintrich & Garcia, 1991). Social goals were defined as strivings that focus on interpersonal relationships (Maehr & Nicholls, 1980; Wentzel, 1989), and a number of different variants were delineated, including social approval goals, social responsibility goals, social status goals, prosocial goals, and affiliation goals (Urden & Maehr, 1995). Importantly, no criteria were in place by which to judge the merit of these additional goal candidates, and this proved an impediment to deciding which, if any, warranted inclusion into a model of achievement goals. It was clear that each of the goal candidates was operative in achievement situations, but it was equally clear that none of the goals focused on a commitment to achievement per se.

The year 1994 saw the premature passing of one of the pioneers of the achievement goal construct, John Nicholls.

#### INCORPORATION OF THE APPROACH-AVOIDANCE DISTINCTION

The distinction between approach and avoidance motivation has deep and widespread intellectual roots. It has been a part of theorizing on motivation since the advent of psychology as a scientific discipline, and it has been utilized by proponents of all major psychological traditions (Elliot, 1999).

Within the achievement motivation literature, the approach-avoidance distinction was incorporated into the first formal model of achievement motivation (the theory of resultant valence offered by Lewin, Dembo, Festinger, & Sears, 1944), and has figured prominently in many other influential accounts of achievement behavior since that time (see Alpert & Haber, 1960; Atkinson, 1957; Covington & Beery, 1976; McClelland, Atkinson, Clark, & Lowell, 1953; Weiner, 1972). Given this history, it is surprising that as the achievement goal approach emerged in the 1990s as the predominant account of achievement behavior, the approach-avoidance distinction continued to be ignored. All researchers either followed the lead of Dweck in not attending to separable approach and avoidance forms of performance goals (Butler, 1992; Skaalvik, Valans, & Sletta, 1994) or they followed the lead of Nicholls in explicitly characterizing both mastery and performance goals as approach forms of motivation (Ames, 1992; Meece & Holt, 1993). My own work at this time focused explicitly on the approach-avoidance distinction and sought to incorporate it within the achievement goal construct.

As a social-personality psychology graduate student in the early 1990s, I read broadly and deeply in the achievement motivation literature. In my reading, I was struck by the absence of attention to the approach-avoidance distinction in achievement goal work, especially given how richly the conceptual and empirical utility of this distinction had been documented in other theoretical frameworks over the years. I was also aware of the fact that a close examination of the extant achievement goal research indicated that the performance goals were not necessarily as deleterious as hypothesized, but could have both negative and positive effects on achievement-relevant processes and outcomes. This pattern of results matched my personal experience with performance goals, perhaps in particular, my experience on the ballfield as a baseball player and coach.

Accordingly, I reexamined the existing empirical work on achievement goals to determine whether the approach-avoidance distinction could help explain the variation in results for performance goals (Elliot,

1994). I noticed that for laboratory experiments, it was possible to distinguish between performance goal manipulations that drew participants' attention to the possibility of a positive outcome (thereby presumably instantiating approach motivation) and those that drew their attention to the possibility of a negative outcome (thereby presumably instantiating avoidance motivation). In similar fashion, for field studies, it was possible to distinguish between performance goal measures comprised entirely of items focused on the possibility of a positive outcome (presumably representing approach motivation) and those that contained items focused on the possibility of a negative outcome (presumably representing avoidance motivation). Classifying the manipulations and measures from extant research on this basis seemed to bring a great deal of clarity to the empirical pattern for performance goals. In general, performance goal manipulations and measures classified as approach tended to produce a positive set of processes and outcomes, whereas those classified as avoidance tended to produce a negative set of processes and outcomes (see Rawsthorne & Elliot, 1999, for an empirically based meta-analytic validation of these observations). If, as this analysis suggested, performance goals focused on positive outcomes and performance goals focused on negative outcomes have very different effects, it seemed quite likely that combining these types of goals together under the (omnibus) performance goal rubric would produce the mixed empirical pattern observed in the extant data.

Thus, on the basis of the long-documented utility of the approach-avoidance distinction, and the apparent utility of this distinction in clarifying the extant achievement goal literature, in my dissertation work I posited that the dichotomous achievement goal framework be revised to form a trichotomous framework (Elliot, 1994; see Elliot & Harackiewicz, 1996). Specifically, I bifurcated the conventional performance goal into conceptually independent approach and avoidance goals, and posited three separate achievement goals: a mastery goal focused on the development of competence or the attainment of task mastery, a performance-approach goal focused on the attainment of normative competence, and a

performance-avoidance goal focused on the avoidance of normative incompetence. Mastery and performance-approach goals were characterized as approach goals, because they focused on potential positive outcomes (improvement/mastery and normative competence, respectively), whereas performance-avoidance goals were characterized as avoidance goals, because they focused on a potential negative outcome (normative incompetence).

The focus on positive possibilities in both mastery and performance-approach goal regulation was posited to lead to a somewhat similar set of positive processes and outcomes. However, some differences in the predictive profile of these forms of approach motivation were also posited given their differential evaluative standards. For example, the external evaluative focus inherent in performance-approach goals was thought to limit the extent to which they, relative to mastery goals, produced positive phenomenological processes and outcomes. However, this same characteristic of performance-approach goals was thought to make them better facilitators of performance attainment than mastery goals, particularly in situations where such attainment depends on following externally imposed criteria rather than inherently interesting aspects of the task itself (Elliot, 1994; Elliot & Harackiewicz, 1996). The focus on negative possibilities in performance-avoidance goals was posited to lead to a broad range of negative processes and outcomes.

Rather than view perceived competence as a moderator of achievement goal effects, I posited it to be an antecedent of achievement goal adoption (Elliot, 1994; Elliot & Church, 1997). High perceived competence was posited to orient individuals to the possibility of success and to facilitate the adoption of approach goals, both mastery and performance-approach, whereas low perceived competence was posited to orient individuals to the possibility of failure and to facilitate the adoption of performance-avoidance goals. Thus, competence expectancies were presumed to exert their effects on processes and outcomes indirectly through their influence on achievement goal adoption, rather than directly in interaction with achievement goals.

Importantly, the influence of perceived competence on achievement goal adoption was thought to be of moderate magnitude. Many other factors besides perceived competence were viewed as contributing to achievement goal adoption, including achievement motives, implicit theories of ability, and characteristics of the achievement task or evaluative setting (Elliot, 1994; 1997). This is a critical point, because several theorists in the 1970s and 1980s had portrayed high-low perceptions of competence as functionally isomorphic with approach-avoidance motivational tendencies (Kukla, 1972; Meyer, 1987). Indeed, it is likely that this portrait of approach-avoidance motivation as reducible to perceived competence was a major reason that approach-avoidance constructs lay fallow during the 1970s and 1980s. That is, perceived competence constructs were quite popular as explanatory constructs during this time, and approach-avoidance motivation was presumed to be redundant with such constructs. In contrast, I portrayed achievement goals as emerging from competence perceptions (as well as other influences), but as having a direct effect on processes and outcomes independent of perceived competence.

The trichotomous achievement goal framework incorporated the distinction between approach and avoidance motivation within performance goals, but left mastery goals intact. In subsequent work (Elliot, 1999), I proposed a  $2 \times 2$  achievement goal framework that incorporated the approach-avoidance distinction within mastery goals as well as performance goals (see also Pintrich, 2000). As I stated earlier, the extant empirical work on mastery goals had yielded a rather clear pattern of findings that indicated that these goals led to a host of positive processes and outcomes. I examined the existing research on mastery goals and concluded that the clarity of the empirical yield was due to the fact that the manipulations and measures used in this research focused uniformly on positive possibilities. That is, in contrast to the extant research on performance goals, in which approach and avoidance motivation were often mixed indiscriminantly, in the extant research on mastery goals, avoidance motivation was

simply omitted altogether. As such, whereas the trichotomous framework separated omnibus performance goals into conceptually independent performance–approach and performance–avoidance goals, the  $2 \times 2$  framework added mastery–avoidance goals as the conceptually independent complement to the mastery–approach goals that were already in place.

Mastery–avoidance goals were described as a focus on avoiding self-referential or task-referential incompetence. Whereas mastery–approach goals entail striving to develop one’s skills and abilities, advance one’s learning, understand material, or master a task, mastery–avoidance goals entail striving to avoid losing one’s skills and abilities (or having their development stagnate), forgetting what one has learned, misunderstanding material, or leaving a task incomplete. These goals were characterized as mastery goals because of their focus on development and task mastery; they were characterized as avoidance goals because of their focus on a potential negative outcome (self- or task-referential incompetence).

Predictions for mastery–avoidance goals were proffered tentatively given the fact that the mastery component of the goal was usually viewed as facilitating positive processes and outcomes, whereas the avoidance component of the goal was usually viewed as producing negative processes and outcomes. Nothing was known about the precise way in which these two components would integrate and function together in self-regulation, so specific hypotheses were viewed as difficult to generate a priori. In general, mastery–avoidance goals were expected to produce less optimal consequences than those for mastery–approach goals, but less deleterious consequences than those for performance–avoidance goals (Elliot, 1999; Elliot & McGregor, 2001). Perceived competence was not expected to moderate the influence of mastery–avoidance goals on processes and outcomes. Rather, perceived competence was viewed as an antecedent of mastery–avoidance goals, such that low perceptions of competence were thought to orient individuals to the possibility of task- or self-referential incompetence and, therefore, to prompt the adoption of mastery–avoidance goals.

Overall, mastery–avoidance goals were presumed to be less prevalent than mastery–approach, performance–approach, and performance–avoidance goals, at least in the achievement contexts typically studied in the achievement goal literature. However, mastery–avoidance goals were viewed as quite common in some instances and for some types of individuals. For example, these goals were thought to be quite common among the elderly. Physical and mental skills and abilities gradually diminish during the aging process, and it is likely that many who experience this diminution adopt a variant of the goal “avoid losing my skills and abilities.” Athletes, students, or employees who have sought to maximize their skills and abilities may at some point feel that they have fully exploited their potential (“reached their peak”) and shift to a focus on “not doing worse than I have done in the past.” Perfectionists may be particularly likely to adopt goals such as “avoid making any mistakes” or “not lose a single point.” Mastery–avoidance goals may also be common among those who think that they have a bad memory and consequently focus on “not forgetting what I have learned” (Elliot, 1999; Elliot & Thrash, 2001). Thus, mastery–avoidance goals were construed as important forms of regulation in some instances, and attending to these goals was viewed as necessary in the interest of more fully accounting for the diverse nature of achievement strivings in real-world situations.

In addition to fully incorporating the approach–avoidance distinction into the achievement goal construct, the  $2 \times 2$  framework sought to explicitly establish competence as the conceptual core of the achievement goal construct. Competence has always been considered an important part of the achievement goal construct, but, as noted earlier, other motivational concepts (e.g., self-presentation, self-assessment, impression management) have also been included in conceptualizing and operationalizing achievement goals. In the  $2 \times 2$  framework, “achievement” was explicitly portrayed in terms of competence, and the achievement goal construct was explicitly grounded in competence alone. Other motivational concerns and foci were thought to

commonly become associated with competence-based goals, but these other concerns and foci were portrayed as antecedents or consequences of competence-based goal adoption, rather than as part of the goal per se (Elliot & Thrash, 2001; Thrash & Elliot, 2001).

Establishing competence as the core of the achievement goal construct provided a firm foundation from which achievement goals could be clearly conceptualized, and different types of achievement goals could be straightforwardly derived. I posited that within a motivational context, the concept of competence may be differentiated in two fundamental ways, in terms of definition and in terms of valence (Elliot, 1999; Elliot & McGregor, 2001).

Competence is *defined* by the standard or referent that is used in evaluating it. Three different standards may be used: an absolute standard (the requirements of the task itself), an intrapersonal standard (one's own past attainment or maximum potential attainment), and a normative standard (the performance of others). That is, competence may be evaluated and, therefore defined, in absolute terms according to one's mastery of a task, in intrapersonal terms according to one's personal trajectory, and in interpersonal terms according to one's attainment relative to others. Absolute and intrapersonal competence share many conceptual and empirical similarities and, at present, may be considered jointly rather than separately. As such, competence may be defined in absolute-intrapersonal terms or in interpersonal terms, and two types of achievement goals may be delineated according to the type of competence that an individual commits to in an achievement situation. This definition aspect of competence has been an important (although, to reiterate, not exclusive) focus of the dichotomous achievement goal framework, with mastery goals commonly entailing commitment to an absolute-intrapersonal standard and performance goals commonly entailing commitment to an intrapersonal standard (Ames, 1984; Dweck & Elliott, 1983; Maehr, 1983; Nicholls, 1984).

Competence is *valenced* in that it can be construed in positive terms (i.e., competence or success) or in negative terms (i.e., incompetence or failure). Two types of achieve-

ment goals may be delineated according whether the competence-relevant focus is on approaching the positive possibility of competence per se, or on avoiding the negative possibility of incompetence. This valence aspect of competence represents the approach-avoidance motivation distinction.

Both definition and valence are integral to the concept of competence in motivational contexts and are presumed to be represented in any and all forms of achievement goals. That is, definition and valence are construed as necessary features of achievement goals, because it is not possible to formulate an achievement goal that does not include, implicitly or explicitly, information as to how competence is defined and valenced. These two aspects of competence are combined to form the four different types of goals represented in the  $2 \times 2$  framework.

Establishing competence as the core of the achievement goal construct not only delineated the precise conceptual nature of achievement goals but also provided clear, systematic guidelines for the evaluation of additional achievement goal candidates. Such candidates must be competence-based and must either extend the two central aspects of competence, definition and valence, or be grounded in an additional aspect of competence not yet identified. A  $3 \times 2$  framework that separates the absolute and intrapersonal definitions of competence was viewed as the most plausible option (Elliot, 1999); these definitions were construed as conceptually separable, with the remaining task being to determine whether they are indeed empirically separable. The definition and valence aspects of competence were portrayed as sufficient to delineate the competence construct; therefore, these components were viewed as sufficient building blocks with which to comprehensively model competence-based strivings.

#### SUBSEQUENT RESEARCH AND DEVELOPMENTS WITHIN THE ACHIEVEMENT GOAL LITERATURE

In the mid- to late 1990s, my colleagues and I produced empirical work testing the tri-chotomous achievement goal framework (e.g., Elliot & Church, 1997; Elliot & Harackiewicz, 1996). Many other research-

ers did likewise (see, especially, Middleton & Midgley, 1997; Skaalvik, 1997; VandeWalle, 1997), and the resulting data base provided strong evidence for the need to attend to the approach–avoidance distinction in achievement goal research. Initially, the three goals in the trichotomous framework were manipulated in the experimental laboratory, and the importance of separating performance–approach and performance–avoidance goals was documented (Elliot & Harackiewicz, 1996). Shortly thereafter, measures of the three goals were developed, and the factor-analytic separability and differential predictive utility of the three goals was demonstrated (Elliot & Church, 1997; Middleton & Midgley, 1997; Skaalvik, 1997; VandeWalle, 1997). Additional empirical work further illustrated the benefits of the trichotomous model (Bembenuddy, 1999; Brett & VandeWalle, 1999; Elliot & McGregor, 1999; Elliot, McGregor, & Gable, 1999; Halvari & Kjormo, 1999; Lopez, 1999; Midgley et al., 1998; VandeWalle & Cummings, 1997). In a few of these studies, perceived competence was examined as a moderator variable and as a possible alternative explanation for observed effects; little evidence emerged for either possibility (Elliot & Church, 1997; Elliot & Harackiewicz, 1996). Perceived competence was, however, documented as a predictor of achievement goals, as posited by the trichotomous model (Elliot & Church, 1997; Lopez, 1999).

During this time, research utilizing the dichotomous achievement goal framework proceeded apace. Most researchers utilizing the dichotomous framework either explicitly labeled their performance goal construct performance–approach, or at minimum were careful to purify their manipulations or measures of avoidance content. The proliferation in achievement goal research that was witnessed early in the 1990s continued, seemingly in linear fashion, as individuals linked goals to a variety of different antecedents and, especially, consequences. Research in educational and sport psychology, in particular, burgeoned (for reviews, see Duda, 2001; Midgley, 2002; Pintrich & Schunk, 2002; Roberts, 2001; Treasure, 2001). Work on achievement goals in industrial–organizational psychology began in earnest during this period, facilitated, in part, by the development of a dichotomous achievement

goal measure by Button, Mathieu, and Zajac (1996; for a review, see Kozlowski et al., 2001).

Of particular note during this time was an influx of important research contributions from individuals at, or trained at, the University of Michigan. These researchers focused on expanding the achievement goal nomological network, establishing interrelations among goals at different levels of analysis, supplementing perceived goal structure measures with observation-based goal structure measures, and documenting the impact of school transitions on goals and goal-related processes and outcomes (see E. Anderman & Midgley, 1997; L. Anderman, 1999; Kaplan & Midgley, 1999; Middleton & Midgley, 1997; Midgley, Arunkumar, & Urdan, 1996; Patrick et al., 1997; Roeser, Midgley, & Urdan, 1996; Ryan & Pintrich, 1997; Turner, Thorpe, & Meyer, 1998; Urdan, Midgley, & Anderman, 1998; Wolters, Yu, & Pintrich, 1996). Much of this work emerged from an unusually fruitful, large-scale longitudinal study of elementary through high school students (see Midgley, 2002). These efforts were fueled by, and fit hand in glove with, a focus on intervention and school reform, articulately expressed in Maehr and Midgley's (1996) *Transforming School Cultures*.

In addition to examining the influence of both personal and structural achievement goals on process and outcomes, researchers in sport psychology, in particular, began to examine achievement goals from an interactionist perspective. This research focused on questions regarding the fit between the goals held by the person and those emphasized in the achievement context (e.g., Can personal performance goals be adaptive in contexts with a performance goal emphasis?). Results from this research tended to support the importance of attending to issues of fit, although no single goal combination emerged as optimal for all processes and outcomes (see Treasure & Roberts, 1998; Walker, Roberts, & Nyheim, 1998; cf. Newton & Duda, 1999).

By the end of the 1990s, several studies examining the role of perceived competence as a moderator of achievement goal effects had been conducted, and the results continued to be decidedly mixed. Some studies found evidence for the hypothesized pattern

of moderation (Cury, Biddle, Sarrazin, & Famose, 1997; Elliott & Dweck, 1988; Smiley & Dweck, 1994), but many did not (Elliott & Church, 1997; Elliot & Harackiewicz, 1994, 1996; Harackiewicz & Elliot, 1993; Kaplan & Midgley, 1997; Miller et al., 1993). This mixed empirical yield prompted Hong, Chiu, Dweck, Lin, and Wan (1999) to question the idea that performance goals can have positive consequences when perceived competence is high. Instead, these researchers suggested that it may be more appropriate to expect performance goals to have inimical consequences across perceptions of competence.

At the beginning of this decade, research on the  $2 \times 2$  achievement goal framework commenced. In the initial work on this model, a measure of the four goals was developed, factor-analytic data supporting the separability of the four goals were presented, and evidence for differential nomological networks was provided (Elliott & McGregor, 2001). Subsequent experimental and field work provided additional support for the viability of the  $2 \times 2$  framework in general, and the mastery-avoidance goal variable specifically (Conroy, in press; Conroy & Elliot, 2004; Conroy, Elliot, & Hofer, 2003; Cury, Elliot, Da Fonseca, & Moller, 2004; Elliot & Reis, 2003; Finney, Pieper, & Barron, 2004; Karabenick, 2003, 2004; Malka & Covington, in press; Van Yperen, 2003; see Moller & Elliot, in press). The available data seemed to indicate that mastery-avoidance goals have antecedents and consequences that are much more similar to performance-avoidance goals than to mastery-approach goals.

Empirical work on the trichotomous achievement goal framework continued to accumulate. By the end of 2003, over 60 studies from 12 different countries had appeared in print, the vast majority of which were published in educational, industrial-organizational, and social-personality psychology journals. This research clearly documented and illustrated the importance of separating performance-approach and performance-avoidance goals, and placed the majority of the deleterious consequences of performance-based goals on performance-avoidance goals. Mastery goals were shown to have widespread positive effects, whereas performance-approach goals were

shown to have a primarily positive but truncated set of positive consequences.

An empirical pattern that began to be acknowledged in the 1990s (see Harackiewicz, Barron, & Elliot, 1998) but became particularly salient as evidence from the  $2 \times 2$ , trichotomous, and dichotomous frameworks accumulated, was that mastery-approach goals often did not positively predict performance attainment, whereas performance-approach goals did so on a rather consistent basis. This and other positive findings for performance-approach goals elicited an engaging dialogue on the costs and benefits of these goals, and, importantly, on implications for application (see Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002; Midgley, Kaplan, & Middleton, 2001; Kaplan & Midgley, 2002; for an equally engaging exchange on more general topics, see Harwood & Hardy, 2001; Harwood, Hardy, & Swain, 2000; Treasure, Duda, Hall, Roberts, & Ames, 2001).

As this dialogue transpired, research from the dichotomous perspective on the antecedents and consequences of mastery-approach and performance-approach goals at all levels of analysis continued to appear in journals in various disciplines, industrial-organizational and sport psychology, in particular (for reviews, see Biddle, Wang, Kavussanu, & Spray, 2003; Deshon & Carr, 2004; Duda, 2004; Sonnentag, Niessen, & Ohly, 2004). Multiple goal perspectives of various sorts became more salient as researchers developed new conceptual and empirical approaches to the study of goal combinations (Barron & Harackiewicz, 2001; Brophy, 2004; Deshon, Kozlowski, Schmidt, Milner, & Wiechmann, 2004; Pintrich, 2000).

The years 2001 and 2003 saw the premature passing of two integral contributors to the achievement goal literature, Carol Midgley and Paul Pintrich, respectively.

#### ISSUES CURRENTLY FACING THE ACHIEVEMENT GOAL LITERATURE

The achievement goal approach remains the predominant approach to achievement motivation in the contemporary literature. This tradition is now over 20 years old and continues to generate important basic and ap-

plied research across a host of psychological disciplines. However, several basic questions continue to demand attention in achievement goal work, and I close this chapter by briefly making note of what I view to be some important conceptual (and associated operational) issues facing the literature today.

1. There is surprisingly little consensus in the achievement goal literature on whether “goal” in “achievement goal” is best represented as aim (Elliot & Thrash, 2001), a combination of reason and aim (Dweck, 1986), or overarching orientation (Ames & Archer, 1988). My perspective is that the term “goal” is best conceptualized as aim, because this use is consistent with the prototypical use of the term in the broader motivational literature, and it affords conceptual precision without, ultimately, sacrificing conceptual breadth. In any given achievement context, an aim (e.g., to do well relative to others) is always undergirded by a more general reason (e.g., to show others I have ability, to feel the satisfaction of success, to avoid the shame of failure, to get the reward my mother promised me), so clearly both aim and reason are important in accounting for achievement behavior. However, as illustrated by the preceding examples, a single aim may be undergirded by many different reasons, and I think it is optimal to keep the aim and reason constructs conceptually separate, and to explore the implications of an assortment of different aim–reason combinations (i.e., “goal complexes”; Elliot & Thrash, 2001; see Grant and Dweck, 2003, for what may be viewed as a step in this direction). With regard to the conception of goals as overarching orientations, I think it is best to keep aims conceptually separate from the many different dispositions, tendencies, processes, and outcomes to which aims are associated, and to empirically examine the links between the antecedents of aims and their affective, cognitive, and behavioral consequences (for more on this issue, see Elliot & Thrash, 2001; Thrash & Elliot, 2001).

2. The way in which the aforementioned conceptual issue is addressed has direct implications for measurement and manipulation. If “goal” is conceptualized as aim, goal measures/manipulations should focus on the

appetitive or aversive standard of evaluation, but if “goal” is conceptualized as a combination of reason and aim, measures/manipulations should focus on both the standard of evaluation and the reason(s) for commitment to that standard, and if “goal” is conceptualized as an overarching orientation, measures/manipulations should include the many different dispositions, tendencies, processes, and outcomes associated with the aim (see Elliot & Thrash, 2001; Thrash & Elliot, 2001). On a related note, it should be acknowledged that the same labels are commonly used to refer to measures/manipulations of great diversity. For example, some performance–avoidance goal measures focus on incompetence, whereas others focus on self-presentation concerns. This poses problems not only across different measures/manipulations but also within individual measures/manipulations. To continue the preceding example, in some achievement goal measures, the performance–avoidance items focus on self-presentation concerns, whereas the performance–approach items focus on normative competence, with little or no focus on self-presentation (thereby confounding approach–avoidance and competence–self-presentation). Operationalization problems of this nature impede interpretational clarity and, ultimately, impede progress in the literature.

3. Some researchers, and indeed some entire disciplines, have largely adopted Ames and Archer’s (1987, 1988) terminological recommendation of “mastery” and “performance” goals. Other researchers, and indeed other entire disciplines, have continued to use an assortment of different labels or, in the case of sport psychology, have continued to utilize Nicholls’s original task–ego labels. The move toward uniform labels paid substantial dividends in the 1990s, and it seems that the more the achievement goal literature can move in this unified direction, the better. There may be important reasons to gravitate to labels other than mastery and performance in some instances, and as the aforementioned conceptual and operational issues become clarified, it may even be necessary for entirely new terminology to emerge. However, in the main, it seems that a continued movement toward uniform labels would help facilitate interdisciplinary cross talk and cross-fertilization, which

would undoubtedly move the literature toward greater integration and maturity. Importantly, Ames and Archer's terminological recommendation is separable from their conceptual expansion of the achievement goal construct; one may be embraced without the other.

4. The term "orientation" is used by achievement goal researchers not only to refer to a broad network of beliefs and feelings, but also to refer to a dispositional goal adoption tendency. Indeed, many, if not most, researchers in this area utilize the achievement goal construct in a dispositional manner in their empirical work. This strong dispositional focus is surprising from both conceptual and empirical standpoints. Conceptually, the achievement goal approach originated, in part, as a critique of dispositional constructs (especially the need for achievement), and as a move toward a more specific, contextual level of analysis (see Maehr & Nicholls, 1980; Dweck & Wortman, 1982). In addition, when construed as a disposition, it is difficult to see how the achievement goal construct differs from the self-attributed achievement motive construct that has been articulated within the classic achievement motive tradition (McClelland, 1985; see Spence & Helmreich's [1983] distinction between work-mastery and competitiveness in the self-attributed need for achievement). Furthermore, if achievement goal orientations are portrayed as general tendencies to adopt particular achievement goals in specific situations, and achievement goals in specific situations are viewed as the direct regulators of achievement behavior, then it seems that achievement goal orientations merely serve a descriptive, and not an explanatory function (see McAdams, 2001, for an analogous statement regarding the Big Five traits). From an empirical standpoint, it is well established that the predictive utility of an independent variable is maximized when it is operationalized at the same level as the dependent variable of interest (see Ajzen & Fishbein, 1977). This correspondence between independent variable and dependent variables is violated in achievement goal research that seeks to predict affect, cognition, or behavior in a specific achievement situation with a dispositional achievement goal

measure. When dispositional achievement goal measures are associated with self-reports of general affective, cognitive, or behavioral tendencies in achievement situations, it is difficult to know precisely what has been learned about actual, real-world achievement motivation. Thus, although the achievement goal construct can be utilized at both dispositional and situation-specific levels of analysis, conceptual and empirical considerations seem to suggest that it may be best suited for the situation-specific level.

5. Conceptual and empirical work on achievement goals is commonly referred to using the term "theory," as in "achievement goal theory" or "goal orientation theory." An important question to ask is what is being referred to when this "theory" moniker is utilized. On one hand, it seems as though there are (a) several different ways to conceptualize mastery and performance goals (e.g., aim, combination of aim and reason, overarching orientation), (b) several different conceptual frameworks that delineate different types of achievement goals (e.g., the dichotomous, trichotomous, and  $2 \times 2$  frameworks), and (c) several different models that explicate links between achievement goals and their antecedents and consequences (e.g., the social-cognitive model, the hierarchical model). In each instance, it would seem that "theories" would be a more accurate descriptor than "theory." On the other hand, it may be the case that "theory" is most often used in general fashion to refer to the differentiation of achievement goals in terms of the mastery-performance distinction. In this case, a legitimate question to ask is whether this distinction alone (construed at this general level) warrants the "theory" designation. It is for the aforementioned reasons that I recommend the term "achievement goal approach" to refer to this most generative and fruitful of achievement motivation traditions.

6. Finally, since its inception, theoretical and empirical work on achievement goals has emerged from two desires: a desire to scientifically account for motivated achievement behavior, and a desire to help individuals (especially children) be optimally motivated in achievement settings. These desires are not incompatible or antagonistic and, on the contrary, it may be argued that these

dual foundations are part of what makes the achievement goal approach so generative and achievement goal research so invigorating and satisfying to conduct. However, disagreements in the achievement goal literature seem to arise when one desire takes precedent over the other—when theoretical work begins to lose its tether to real-world considerations, or when real-world considerations alone begin to drive data interpretation and summary. Importantly, theoretically derived empirical work can tell us how achievement goals operate in the present social-psychological context; this work is mute regarding whether the social-psychological context optimally should be this way, whether the social-psychological context can be changed, and whether achievement goals operate the same way across different social-psychological contexts (see Elliot & Moller, 2003). Simply stated, theory-based description and explanation is altogether different from real-world prescription. Theory begets application, and application informs theory, and I believe it is in drawing deeply from both that the achievement goal approach will develop to its full potential.

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#### REFERENCES

- Ainley, M. D. (1993). Styles of engagement with learning: Multidimensional assessment of their relationship with strategy use and school achievement. *Journal of Educational Psychology, 85*, 395–405.
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin, 84*, 888–918.
- Alpert, R., & Haber, R. N. (1960). Anxiety in academic achievement situations. *Journal of Abnormal and Social Psychology, 61*, 207–215.
- Ames, C. (1984). Competitive, cooperative, and individualistic goal structures: A cognitive-motivational analysis. In C. Ames & R. Ames (Eds.), *Research on motivation in education* (Vol. 3, pp. 177–207). New York: Academic Press.
- Ames, C. (1990). Motivation: What teachers need to know. *Teachers College Record, 91*, 409–421.
- Ames, C. (1992). Achievement goals, motivational climate, and motivational processes. In G. Roberts (Ed.), *Motivation in sports and exercise* (pp. 161–176). Champaign, IL: Human Kinetics.
- Ames, C., & Archer, J. (1987). Mothers' belief about the role of ability and effort in school learning. *Journal of Educational Psychology, 79*, 409–414.
- Ames, C., & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. *Journal of Educational Psychology, 80*, 260–267.
- Anderman, E., & Midgley, C. (1997). Changes in achievement goal orientations, perceived academic competence, and grades across the transition to middle level schools. *Contemporary Educational Psychology, 22*, 269–298.
- Anderman, L. (1999). Classroom goal orientation, school belonging, and social goals as predictors of students' positive and negative affect following the transition to middle school: Schools can make a difference. *Journal of Research and Development in Education, 32*, 131–147.
- Atkinson, J. W. (1957). Motivational determinants of risk-taking behavior. *Psychological Review, 64*, 359–372.
- Barron, K. E., & Harackiewicz, J. M. (2001). Achievement goals and optimal motivation: Testing multiple goal models. *Journal of Personality and Social Psychology, 80*, 706–722.
- Bembenutty, H. (1999). Sustaining motivation and academic goals: The role of academic delay of gratification. *Learning and Individual Differences, 11*, 233–259.
- Biddle, S. J., Wang, C. K., Kavussanu, M., & Spray, C. M. (2003). Correlates of achievement goal orientations in physical activity: A systematic review of research. *European Journal of Sport Science, 3*, 1–20.
- Blumenfeld, P. (1992). Classroom learning and motivation: Clarifying and expanding goal theory. *Journal of Educational Psychology, 84*, 272–281.
- Bouffard, T., Boisvert, J., Vezeau, C., & Larouche, C. (1995). The impact of goal orientation of self-regulation and performance among college students. *British Journal of Educational Psychology, 65*, 317–329.
- Brett, J. F., & VandeWalle, D. (1999). Goal orientation and goal content as predictors of performance in a training program. *Journal of Applied Psychology, 84*, 863–873.
- Brophy, J. (2004). *Motivating students to learn* (2nd ed.). Mahwah, NJ: Erlbaum.
- Butler, R. (1988). Task-involving and ego-involving properties of evaluation: Effects of different feedback conditions on motivational perceptions, inter-

- est, and performance. *Journal of Educational Psychology*, 79, 474-482.
- Butler, R. (1992). What young people want to know when: Effects of mastery and ability goals on interest in different kinds of social comparisons. *Journal of Personality and Social Psychology*, 62, 934-943.
- Button, S. B., Mathieu, J. E., & Zajac, D. M. (1996). Goal orientation in organizational research: A conceptual and empirical foundation. *Organizational Behavior and Human Decision Processes*, 67, 26-48.
- Conroy, D. E. (in press). The unique psychological meanings of multidimensional fears of failing. *Journal of Sport and Exercise Psychology*.
- Conroy, D. E., & Elliot, A. J. (2004). Fear of failure and achievement goals in sport: Addressing the issue of the chicken and the egg. *Anxiety, Stress, and Coping*, 17, 271-285.
- Conroy, D. E., Elliot, A. J., & Hofer, S. M. (2003). A 2 × 2 achievement goals questionnaire for sport. *Journal of Sport and Exercise Psychology*, 25, 456-476.
- Covington, M. V. (1984). Strategic thinking and the fear of failure. In J. Segal, S. Chipman, & R. Glaser (Eds.), *Thinking and learning skills: Relating instruction to basic research* (pp. 389-416). Hillsdale, NJ: Erlbaum.
- Covington, M., & Beery, R. (1976). *Self-worth and school learning*. New York: Holt, Rinehart & Winston.
- Cury, F., Biddle, S., Sarrazin, P., & Famose, J. (1997). Achievement goals and perceived ability predict investment in learning a sport task. *British Journal of Educational Psychology*, 67, 293-309.
- Cury, F., Elliot, A. J., Da Fonseca, D., & Moller, A. C. (2004). *The social-cognitive model of achievement motivation and the 2 × 2 achievement goal framework*. Manuscript submitted for publication.
- Deshon, R. P., & Carr, J. Z. (2004). *A motivated action theory account of goal oriented behavior*. Manuscript submitted for publication.
- Deshon, R. P., Kozlowski, S. W. J., Schmidt, A. M., Milner, K. R., & Wiechmann, D. (2004). A multiple goal, multilevel model of feedback effects on the regulation of individual and team performance in training. *Journal of Applied Psychology*, 89, 1035-1056.
- Diener, C. I., & Dweck, C. S. (1978). An analysis of learned helplessness: Continuous changes in performance, strategy, and achievement cognitions following failure. *Journal of Personality and Social Psychology*, 36, 451-462.
- Diener, C. I., & Dweck, C. S. (1980). An analysis of learned helplessness: II. The processing of success. *Journal of Personality and Social Psychology*, 39, 940-952.
- Duda, J. L. (1988). The relationship between goal perspectives, persistence and behavioral intensity among male and female recreational sport participants. *Leisure Studies*, 10, 95-106.
- Duda, J. L. (2001). Achievement goal research in sport: Pushing the boundaries and clarifying some misunderstandings. In G. Roberts (Ed.), *Advances in motivation in sport and exercise* (pp. 129-182). Champaign, IL: Human Kinetics.
- Duda, J. L. (2004). Goal setting and achievement motivation in sport. In C. Spielberger (Ed.), *Encyclopedia of applied psychology*. San Diego: Academic Press.
- Dweck, C. S. (1975). The role of expectations and attributions in the alleviation of learned helplessness. *Journal of Personality and Social Psychology*, 31, 674-685.
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41, 1040-1048.
- Dweck, C. S. (1989). Motivation. In A. Lesgold & R. Glaser (Eds.), *Foundations for a psychology of education* (pp. 87-136). Hillsdale, NJ: Erlbaum.
- Dweck, C. S., & Elliott, E. S. (1983). Achievement motivation. In E. M. Heatherington (Ed.), *Handbook of child psychology: Socialization, personality, and social development* (Vol. 4, pp. 643-691). New York: Wiley.
- Dweck, C. S., & Leggett, E. L. (1988). A social cognitive approach to motivation and personality. *Psychological Review*, 95, 256-273.
- Dweck, C. S., & Reppucci, N. D. (1973). Learned helplessness and reinforcement responsibility in children. *Journal of Personality and Social Psychology*, 25, 109-116.
- Dweck, C., & Wortman, C. (1982). Learned helplessness, anxiety, and achievement motivation: Neglected parallels in cognitive, affective, and coping responses. In H. Krohne & L. Laux (Eds.), *Achievement, stress, and anxiety* (pp. 92-126). Washington, DC: Hemisphere.
- Elliot, A. J. (1994). *Approach and avoidance achievement goals: An intrinsic motivation analysis*. Unpublished doctoral dissertation. University of Wisconsin, Madison.
- Elliot, A. J. (1997). Integrating "classic" and "contemporary" approaches to achievement motivation: A hierarchical model of approach and avoidance achievement motivation. In P. Pintrich & M. Maehr (Eds.), *Advances in motivation and achievement* (Vol. 10, pp. 143-179). Greenwich, CT: JAI Press.
- Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist*, 34, 149-169.
- Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 72, 218-232.
- Elliot, A. J., & Covington, M. V. (2001). Approach and avoidance motivation. *Educational Psychology Review*, 12, 73-92.
- Elliot, A. J., & Harackiewicz, J. M. (1994). Goal setting, achievement orientation, and intrinsic motivation: A mediational analysis. *Journal of Personality and Social Psychology*, 66, 968-980.
- Elliot, A. J., & Harackiewicz, J. M. (1996). Approach

- and avoidance achievement goals and intrinsic motivation: A mediational analysis. *Journal of Personality and Social Psychology*, 70, 968–980.
- Elliot, A. J., & McGregor, H. A. (1999). Test anxiety and the hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 76, 626–644.
- Elliot, A. J., & McGregor, H. A. (2001). A 2 × 2 achievement goal framework. *Journal of Personality and Social Psychology*, 80, 501–519.
- Elliot, A. J., McGregor, H. A., & Gable, S. (1999). Achievement goals, study strategies, and exam performance: A mediational analysis. *Journal of Educational Psychology*, 91, 549–563.
- Elliot, A. J., & Moller, A. (2003). Performance–approach goals: Good or bad forms of regulation? *International Journal of Educational Research*, 39, 339–356.
- Elliot, A. J., & Reis, H. (2003). Attachment and exploration in adulthood. *Journal of Personality and Social Psychology*, 85, 317–331.
- Elliot, A. J., & Thrash, T. M. (2001). Achievement goals and the hierarchical model of achievement motivation. *Educational Psychology Review*, 12, 139–156.
- Elliott, E. S., & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology*, 54, 5–12.
- Epstein, J. L. (1988). Effective schools or effective students: Dealing with diversity. In R. Haskins & D. MacRae (Eds.), *Policies for America's public schools: Teacher quality indicators* (pp. 89–126). New York: Academic Press.
- Farr, J. L., Hofmann, D. A., & Ringenbach, K. L. (1993). Goal orientation and action control theory: Implications for industrial and organizational psychology. *International Journal of Organizational Psychology*, 8, 193–232.
- Finney, S. J., Pieper, S. L., & Barron, K. E. (2004). Examining the psychometric properties of the achievement goal questionnaire in a general academic context. *Educational and Psychological Measurement*, 64, 365–382.
- Fox, K., Goudas, M., Biddle, S., Duda, J. L., & Armstrong, N. (1994). Children's task and ego profiles in sport. *British Journal of Educational Psychology*, 64, 253–261.
- Grant, H., & Dweck, C. S. (2003). Clarifying achievement goals and their impact. *Journal of Personality and Social Psychology*, 85, 541–553.
- Halvari, H., & Kjormo, O. (1999). A structural model of achievement motives, performance approach and avoidance goals, and performance among Norwegian Olympic athletes. *Perceptual and Motor Skills*, 89, 997–1022.
- Harackiewicz, J., Barron, K., & Elliot, A. (1998). Re-thinking achievement goals: When are they adaptive for college students and why? *Educational Psychologist*, 33, 1–21.
- Harackiewicz, J. M., Barron, K. E., Pintrich, P. R., Elliot, A. J., & Thrash, T. M. (2002). Revision of achievement goal theory: Necessary and illuminating. *Journal of Educational Psychology*, 94, 638–645.
- Harackiewicz, J. M., & Elliot, A. J. (1993). Achievement goals and intrinsic motivation. *Journal of Personality and Social Psychology*, 65, 904–915.
- Harackiewicz, J. M., & Sansone, C. (1991). Goals and intrinsic motivation: You *can* get there from here. In M. Maehr & P. Pintrich (Eds.), *Advances in motivation and achievement* (Vol. 7, pp. 21–49). Greenwich, CT: JAI Press.
- Harwood, C., & Hardy, L. (2001). Persistence and effort in moving achievement goal research forward: A response to Treasure and colleagues. *Journal of Sport and Exercise Psychology*, 23, 330–345.
- Harwood, C., Hardy, L., & Swain, A. (2000). Achievement goals in sport: A critique of conceptual and measurement issues. *Journal of Sport and Exercise Psychology*, 22, 235–255.
- Hong, Y., Chiu, C., Dweck, C. S., Lin, D., & Wan, W. (1999). Implicit theories, attributions, and coping: A meanings system approach. *Journal of Personality and Social Psychology*, 77, 588–599.
- Jagacinski, C. M., & Nicholls, J. G. (1987). Competence and affect in task involvement and ego involvement: The impact of social comparison information. *Journal of Educational Psychology*, 79, 107–114.
- Kanfer, R. (1990). Motivation theory and industrial and organizational psychology. In M. Dunnette & L. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. 1, 2nd ed., pp. 75–170). Palo Alto, CA: Consulting Psychologists Press.
- Kaplan, A., & Midgley, C. (1997). The effect of achievement goals: Does level of perceived competence make a difference? *Contemporary Educational Psychology*, 22, 415–435.
- Kaplan, A., & Midgley, C. (1999). The relationship between perceptions of the classroom goal structure and early adolescents' affect in school: The mediating role of coping strategies. *Learning and Individual Differences*, 11, 187–212.
- Kaplan, A., & Midgley, C. (2002). Should childhood be a journey or a race?: Response to Harackiewicz et al. (2002). *Journal of Educational Psychology*, 94, 646–648.
- Karabenick, S. A. (2003). Seeking help in large college classes: A person-centered approach. *Contemporary Educational Psychology*, 28, 37–58.
- Karabenick, S. A. (2004). Perceived achievement goal structure and college student help seeking. *Journal of Educational Psychology*, 96, 569–581.
- Koesnter, R., Zuckerman, M., & Koestner, J. (1987). Praise, involvement, and intrinsic motivation. *Journal of Personality and Social Psychology*, 53, 383–390.
- Kozlowski, S. W., Gully, S. M., Brown, S. G., Salas, E., Smith, E. M., & Nason, E. (2001). Effects of training goals and goal orientation traits on multi-

- dimensional training outcomes and performance adaptability. *Organizational Behavior and Human Decision Processes*, 85, 1-31.
- Kukla, A. (1972). Attributional determinants of achievement-related behavior. *Journal of Personality and Social Psychology*, 21, 166-174.
- Lewin, K., Dembo, T., Festinger, L., & Sears, R. (1944). Level of aspiration. In J. McV. Hunt (Ed.), *Personality and the behavioral disorders* (pp. 333-378). New York: Ronald Press.
- Lopez, D. F. (1999). Social cognitive influences on self-regulated learning: The impact of action-control beliefs and academic goals on achievement-related outcomes. *Learning and Individual Differences*, 11, 301-319.
- Maehr, M. L. (1983). On doing well in science: Why Johnny no longer excels, why Sarah never did. In S. Paris, G. Olson, & H. Stevenson (Eds.), *Learning and motivation in the classroom* (pp. 179-210). Hillsdale, NJ: Erlbaum.
- Maehr, M. L. (1984). Meaning and motivation. In R. Ames & C. Ames (Eds.), *Research on motivation in education: Student motivation* (Vol. 1, pp. 115-144). New York: Academic Press.
- Maehr, M. L., & Midgley, C. (1991). Enhancing student motivation: A schoolwide approach. *Educational Psychologist*, 26, 399-427.
- Maehr, M. L., & Midgley, C. (1996). *Transforming school cultures*. Boulder, CO: Westview Press.
- Maehr, M. L., & Nicholls, J. G. (1980). Culture and achievement motivation: A second look. In N. Warren (Ed.), *Studies in cross cultural psychology* (Vol. 3, pp. 221-267). New York: Academic Press.
- Malka, A., & Covington, M. V. (in press). Perceiving school performance as instrumental to future goal attainment: Effects on graded performance. *Contemporary Educational Psychology*.
- McAdams, D. (2001). *The person: An integrated introduction to personality psychology* (3rd ed.). New York: International Thomson.
- McClelland, D. C. (1985). *Human motivation*. Cambridge, UK: Cambridge University Press.
- McClelland, D. C., Atkinson, J. W., Clark, R. A., & Lowell, E. L. (1953). *The achievement motive*. New York: Appleton-Century-Crofts.
- Meece, J. L. (1991). The classroom context and students' motivational goals. In M. Maehr & P. Pintrich (Eds.), *Advances in motivation and achievement* (Vol. 7, pp. 261-285). Greenwich, CT: JAI Press.
- Meece, J. L., Blumenfeld, P. C., & Hoyle, R. H. (1988). Students' goal orientations and cognitive engagement in classroom activities. *Journal of Educational Psychology*, 80, 514-523.
- Meece, J. L., & Holt, K. (1993). A pattern analysis of students' achievement goals. *Journal of Educational Psychology*, 85, 582-590.
- Meyer, W. (1987). Perceived ability and achievement-related behavior. In F. Halisch & J. Kuhl (Eds.), *Motivation, intention, and volition* (pp. 73-86). New York: Springer-Verlag.
- Middleton, M., & Midgley, C. (1997). Avoiding the demonstration of lack of ability: An underexplored aspect of goal theory. *Journal of Educational Psychology*, 89, 710-718.
- Midgley, C. (Ed.). (2002). *Goals, structures, and patterns of adaptive learning*. Mahwah, NJ: Erlbaum.
- Midgley, C., Arunkumar, R., & Urdan, T. (1996). If I don't do well tomorrow, there's a reason: Predictors of adolescents' use of academic self-handicapping behavior. *Journal of Educational Psychology*, 88, 423-434.
- Midgley, C., Kaplan, A., & Middleton, M. (2001). Performance-approach goals: Good for what, for whom, under what circumstances, and at what cost? *Journal of Educational Psychology*, 93, 77-86.
- Midgley, C., Kaplan, A., Middleton, M., Maehr, M., Urdan, T., Hicks, L., Anderman, L., et al. (1998). The development and validation of scales assessing students' achievement goal orientations. *Contemporary Educational Psychology*, 23, 113-131.
- Midgley, C., & Urdan, T. (1995). Predictors of middle school students' use of self-handicapping strategies. *Journal of Early Adolescence*, 15, 389-411.
- Miller, R. B., Behrens, J. T., Greene, B. A., & Newman, D. (1993). Goals and perceived ability: Impact on student valuing, self-regulation, and persistence. *Contemporary Educational Psychology*, 18, 2-14.
- Miller, A., & Hom, H. L. (1990). Influence of extrinsic and ego incentive value on persistence after failure and continuing motivation. *Journal of Educational Psychology*, 82, 539-545.
- Moller, A. C., & Elliot, A. J. (in press). The 2 x 2 achievement goal framework: An overview of empirical research. *Progress in Educational Research*.
- Newton, M. L., & Duda, J. L. (1998). The interaction between motivational climate, dispositional goal orientation, and perceived ability in predicting indices of motivation. *International Journal of Sport Psychology*, 29, 1-20.
- Nicholls, J. G. (1976). Effort is virtuous, but it's better to have ability: Evaluative responses to perceptions of effort and ability. *Journal of Personality and Social Psychology*, 31, 306-315.
- Nicholls, J. G. (1978). The development of concepts of effort and ability, perception of own attainment, and the understanding that difficult tasks require more ability. *Child Development*, 49, 800-814.
- Nicholls, J. G. (1979). Quality and equality in intellectual development. *American Psychologist*, 34, 1071-1084.
- Nicholls, J. G. (1980). The development of the concept of difficulty. *Merrill-Palmer Quarterly*, 26, 271-281.
- Nicholls, J. G. (1983). Conceptions of ability and achievement motivation. In R. Ames & C. Ames (Eds.), *Research on motivation in education* (Vol. 3, pp. 185-218). New York: Academic Press.
- Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review*, 91, 328-346.

- Nicholls, J. G. (1989). *The competitive ethos and democratic education*. Cambridge, MA: Harvard University Press.
- Nicholls, J. G., Cheung, P., Lauer, J., & Patashnick, M. (1989). Individual differences in academic motivation: Perceived ability, goals, beliefs, and values. *Learning and Individual Differences, 1*, 63-84.
- Nicholls, J. G., & Dweck, C. S. (1979). *A definition of achievement motivation*. Unpublished manuscript, University of Illinois.
- Nicholls, J. G., Patashnick, M., Cheung, P., Thorkildsen, T., & Lauer, J. (1989). Can achievement motivation succeed with only one conception of success? In F. Halisch & J. Van den Beroken (Eds.), *Competence considered* (pp. 187-204). Lisse, The Netherlands: Swets & Zeitlinger.
- Nicholls, J. G., Patashnick, M., & Nolen, S. (1985). Adolescents' theories of education. *Journal of Educational Psychology, 77*, 683-692.
- Nolen, S. B. (1988). Reasons for studying: Motivational orientations and study strategies. *Cognition and Instruction, 5*, 269-287.
- Patrick, H., Ryan, A. M., Anderman, L. H., Middleton, M., Linnenbrink, L., Hruda, L. Z., et al. (1997). *Manual for observing patterns of adaptive learning (OPAL): A protocol for classroom observations*. Ann Arbor: University of Michigan Press.
- Pintrich, P. (2000). An achievement goal theory perspective on issues in motivation terminology, theory, and research. *Contemporary Educational Psychology, 25*, 92-104.
- Pintrich, P., & Garcia, T. (1991). Student goal orientation and self-regulation in the college classroom. In M. Maehr & P. Pintrich (Eds.) *Advances in motivation and achievement* (Vol. 7, pp. 371-402). Greenwich, CT: JAI Press.
- Pintrich, P. R., & Schunk, D. (2002). *Motivation in education: Theory, research, and applications* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Rawsthorne, L. J., & Elliot, A. J. (1999). Achievement goals and intrinsic motivation: A meta-analytic review. *Personality and Social Psychology Review, 3*, 326-344.
- Roberts, G. C. (2001). Understanding the dynamics of motivation in physical activity: The influence of achievement goals on motivational processes. In G. Roberts (Ed.), *Advances in motivation in sport and exercise* (pp. 1-50). Champaign, IL: Human Kinetics.
- Roeser, R. W., Midgley, C., & Urdan, T. C. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: The mediating role of goals and belonging. *Journal of Educational Psychology, 88*, 408-422.
- Ryan, A., & Pintrich, P. (1997). Should I ask for help?: The role of motivation and attitudes in adolescents' help-seeking in math class. *Journal of Educational Psychology, 89*, 329-341.
- Ryan, R. M. (1982). Control and information in the interpersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology, 43*, 450-461.
- Sansone, C., Sachau, D. A., & Weir, C. (1989). Effects of instruction on intrinsic interest: The importance of context. *Journal of Personality and Social Psychology, 57*, 819-829.
- Seifriz, J. J., Duda, J. L., & Chi, L. (1992). The relationship of perceived motivational climate to intrinsic motivation and beliefs about success in basketball. *Journal of Sport and Exercise Psychology, 14*, 375-391.
- Skaalvik, E. M. (1997). Self-enhancing and self-defeating ego orientation: Relations with task and avoidance orientation, achievement, self-perceptions, and anxiety. *Journal of Educational Psychology, 89*, 71-81.
- Skaalvik, E. M., Valans, H., & Sletta, O. (1994). Task involvement and ego involvement: Relations with academic achievement, academic self-concept, and self-esteem. *Scandinavian Journal of Educational Research, 38*, 231-243.
- Smiley, P. A., & Dweck, C. S. (1994). Individual differences in achievement goals among young children. *Child Development, 65*, 1723-1743.
- Sonnentag, S., Niessen, C., & Ohly, S. (2004). Learning at work: Training and development. In C. Cooper & I. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 19, pp. 255-289). New York: Wiley.
- Spence, J. T., & Helmreich, R. L. (1983). Achievement-related motives and behavior. In J. T. Spence (Ed.), *Achievement and achievement motives: Psychological and sociological approaches* (pp. 10-74). San Francisco: Freeman.
- Stipek, D. J., & Kowalski, P. S. (1989). Learned helplessness in task-orienting versus performance-orienting test conditions. *Journal of Educational Psychology, 81*, 384-391.
- Sujan, H., Weitz, B., & Kumar, N. (1994). Learning orientation, working smart, and effective selling. *Journal of Marketing, 58*, 39-52.
- Thorkildsen, T. A. (1989). Pluralism in children's reasoning about social justice. *Child Development, 60*, 965-972.
- Thrash, T. M., & Elliot, A. J. (2001). Delimiting and integrating achievement motive and goal constructs. In A. Efklides, J. Kuhl, & R. Sorrentino (Eds.), *Trends and prospects in motivational research* (pp. 1-19). Dordrecht, The Netherlands: Kluwer Academic.
- Treasure, D. C. (2001). Enhancing young people's motivation in youth sport: An achievement goal approach. In G. Roberts (Ed.), *Advances in motivation in sport and exercise* (pp. 79-100). Champaign, IL: Human Kinetics.
- Treasure, D. C., Duda, J. L., Hall, H. K., Roberts, G. C., & Ames, C. (2001). Clarifying misconceptions and misrepresentations in achievement goal research in sport: A response to Harwood, Hardy, and Swain. *Journal of Sport and Exercise Psychology, 23*, 317-329.

- Treasure, D. C., & Roberts, G. C. (1998). Relationship between female adolescents' achievement goal orientations, perceptions of the motivational climate, belief about success and sources of satisfaction in basketball. *International Journal of Sport Psychology*, 29, 211-230.
- Turner, J., Thorpe, P., & Meyer, D. (1998). Students' reports of motivation and negative affect: A theoretical and empirical analysis. *Journal of Educational Psychology*, 90, 758-771.
- Urdan, T. C. (1997). Achievement goal theory: Past results, future directions. In M. Maehr & P. Pintrich (Eds.), *Advances in motivation and achievement* (Vol. 10, pp. 243-269). Greenwich, CT: JAI Press.
- Urdan, T. C., & Maehr, M. (1995). Beyond a two-goal theory of motivation and achievement: A case for social goals. *Review of Educational Research*, 65, 213-243.
- Urdan, T. C., Midgley, C., & Anderman, E. (1998). The role of classroom goal structure in students' use of self-handicapping. *American Educational Research Journal*, 35, 101-122.
- VandeWalle, D. (1997). Development and validation of a work domain goal orientation instrument. *Educational and Psychological Measurement*, 57, 995-1015.
- VandeWalle, D., & Cummings, L. L. (1997). A test of the influence of goal orientation on the feedback-seeking process. *Journal of Applied Psychology*, 82, 390-400.
- Van Yperen, N. W. (2003). Task interest and actual performance: The moderating effects of assigned and adopted purpose goals. *Journal of Personality and Social Psychology*, 85, 1006-1015.
- Walker, B. W., Roberts, G. C., & Nyheim, M. (1998). Predicting enjoyment and beliefs about success in sport: An interactional perspective. *Journal of Sport and Exercise Psychology*, 20(Suppl.), S59.
- Weiner, B. (1972). *Theories of motivation: From mechanism to cognition*. Chicago: Rand McNally.
- Wentzel, K. R. (1989). Adolescent classroom goals, standards for performance, academic achievement: An interactionist perspective. *Journal of Educational Psychology*, 81, 131-142.
- Wentzel, K. R. (1991). Social and academic goals at school: Motivation and achievement in context. In M. Maehr & P. Pintrich (Eds.), *Advances in motivation and achievement* (Vol. 7, pp. 185-212). Greenwich, CT: JAI Press.
- Wentzel, K. R. (1993). Motivation and achievement in early adolescence: The role of multiple classroom goals. *Journal of Early Adolescence*, 13, 4-10.
- White, S. A., Duda, J. L., & Hart, S. (1992). An exploratory examination of the Parent Initiated Motivational Climate Questionnaire. *Perceptual and Motor Skills*, 75, 875-880.
- Wolters, C., Yu, S., & Pintrich, P. (1996). The relation between goal orientation and students' motivational beliefs and self-regulated learning. *Learning and Individual Differences*, 8, 211-238.